

Claims:

1. A computer software product containing machine readable instructions for execution by an electronic processor to provide a database management system in accordance with a schema, the schema including:
 - a first table to store the names of various entity types;
 - a second table related to the first table to store the names of entities of the various entity types;
 - a third table related to the first table to store the names of fields in respect of the various entity types;
 - one or more value storage tables related to the second and third tables to associate stored field values with entities; and
 - identifiers to indicate the nature of the data to be stored in each of said tables.
2. A computer software product according to claim 1, wherein the schema includes a first hierarchical relationship applied to the first table and a second hierarchical relationship applied to the second table to facilitate definition of hierarchical entities.
3. A computer software product according to claim 1, wherein the schema includes tables to store relationships between the entities.
4. A computer software product according to claim 1, wherein the first table includes a column to store pointers corresponding to entity types the pointers indicating locations from which default values may be obtained during creation of new instances of the entity types.
5. A computer software product according to claim 1, wherein the third table includes a column to store data indicating that a newly created entity's name is to be generated from data stored in columns of the one or more value storage tables.
6. A computer software product according to claim 1, wherein the one or more value storage tables comprise a number of value tables each including a column of values of a particular type.

7. A computer software product according to claim 6, wherein one or more of the value tables are each related to one or more other tables of the schema.
8. A computer software product according to claim 7, wherein the one or more of the value tables are each related to the second table.
9. A computer software product according to claim 8, wherein the one or more of the value tables are arranged to store pointers to data stored external to data structures created by the computer software product.
10. A computer software product according to claim 6, wherein the schema includes a data type table relating names of the value storage tables to corresponding names of the column of values of a particular type.
11. A computer software product according to claim 10, wherein the data type table is related to the third table.
12. A computer software product according to claim 11, wherein the data type table is related to an intermediate value type table and wherein the value type table points to the third table.
13. A computer software product according to claim 1, wherein the third table includes columns to define multiple field functionality.
14. A computer software product according to claim 6, wherein the third table includes a column to indicate if historical data values are to be stored in respect of a corresponding field type and wherein the value storage tables each include a column to store current values of said field type and to store data indicating when the current values were written.
15. A computer software product according to claim 6, wherein the third table includes a column to store values indicating whether or not values of a newly created instance of an entity are to be inherited from another instance of an entity.

16. A computer software product according to claim 6, wherein the schema includes a format table having columns to store data storage formats.

17. A computer software product according to claim 6, wherein the schema includes one or more tables to store values indicating groupings of sets of fields.

18. A method implemented by means of an electronic processor to store data, said data concerning a number of entities of various entity types and relationships between the various entity types, the method including:

storing identifiers of each of the entity types in a first table;

storing identifiers of each of the number of entities in a second table related to the first table;

storing identifiers of each of a number of field types for the various entity types in a third table related to the first table; and

storing field values associated with the entities in one or more value storage tables related to the second and third tables.

19. A method according to claim 18 further including:

storing hierarchical entities by applying a first hierarchical relationship to the first table and a second hierarchical relationship to the second table.

20. A method according to claim 18 further including :

storing data in one or more tables defining relationships between the entities.

21. A method according to claim 20, wherein the step of storing data defining relationships includes:

storing data identifying various relationship types in a fifth table; and

storing data identifying relations in a sixth table.

22. A computational device operated according to the method of claim 18.